/1 cont./

242 this estimate. Through repeated tests he finds out the type of the soil and draws the necessary conclusions. As a rule, he proceeds as follows: with the machete, he digs a hole and examines the soil.
[823] By crumbling it between his fingers, he finds out its quality by touch. He distinguishes three types: sandy, clayey, and black, allowing for certain variants and intermediary types, according to the composition and percentage of clay or sand. He makes these soil tests at various depths and in various places when he suspects that only a thin layer is involved, or to find out how far /the layer/ extends. The type of garden also depends on the type of the soil; in other terms: depending on what he wishes to plant, he has to choose a /specific/ type of soil. For this reason, in his hunting forays through the forest, the Indian pays attention to the ground through which he passes in order to find out where he will find appropriate soil when he needs it. The following rule applies as a general norm:

242 194
sandy soil: good only for bitter manioc; inadequate for other plants.

[845]
clayey soil: good especially for bitter manioc, tubercles in general, and also for banana plantations; other plants do not grow well in this soil.

[849]
black soil: good for everything. For this reason, black soil is always sought out and preferred. This is the tobacco ground par excellence.

*241 [242] 2. Size and shape of the plot. As was already partly explained, the size of the plot depends on the quality of the soil. If /the Indian/ finds the chosen soil somewhat weak, he figures out beforehand that the harvest will be less satisfactory, and makes the plot somewhat larger. From the practice he has acquired since youth, he empirically figures out the area that will be needed. To do this he does not use measurements, as our peasants do ("braças," "varas," and such).
[804] I attempted in various ways to find out how the Munduruku figure out the size of the plot he is about to prepare. The answers were always the same: "... just by looking, you already know ..." /8/ or "... just by looking...." If the family has grown through the years,

/8 cont./

*241 or if other relatives have come to live in the house, then the plot is
•[804] made larger. The calculation is thus basically intuitive, even though it is based on practical experience gathered through generations.

*241 Nowadays, the Indian usually plants a little more than he needs
197 for his own use, to obtain a surplus (along with the surplus of rubber
[437] he has gathered) and improve his lot by using it in the purchase of clothes, nets, machetes, etc. The garden, therefore, helps him to maintain his economic balance at his present stage of acculturation.

[242] Another factor which also depends in part on the terrain is the shape of the plot. Here, however, other elements are already in evidence, especially the influence of neo-Brazilian acculturation. Whenever possible, the Munduruků prefer the traditional shape, which is rounded or elliptic-oval. Thus did the ancestors make their plots, and thus they are made to this day in the villages of the interior. Still in 1957, this garden shape could easily be distinguished when flying over the villages of the Kabitutu and Pararokti. But this is no longer an iron rule. "It depends on the terrain," they told me. But I believe that the influence of the peasants is stronger than that of the terrain. Thus we find gardens of various shapes, elongated, rectangular, and even square. The latter predominate especially in
[361] the Cururu and Tapajós region, and thus in areas where the Munduruků
[182] no longer live in village communities but in isolated dwellings. The dismembering of the community and the emancipation of the Munduruků family from the village system are reflected here as they are in many other aspects of the culture.

*241 3. Clearing—ryut tatabm. To clear is to cut down the under-
growth with the machete, removing from the site of the future garden shrubs, young trees, and brush. This is done to prepare for the next task, which is the felling of the trees. In this way, the woodcutters have greater freedom of action. After the trees are felled, it would be impossible to clear the ground of undergrowth. As a rule, the clearing is done in three days' work, and some time is allowed to elapse for the brushwood to dry.

by Fa. Antonino and Fa. Pelino de Castrovalva. This mission holds some five hundred Indians of the Mundurucu tribe.

The missionary Fa. Pelino who was alone there, his companion having already left Bacabal, lent me as an interpreter a Mundurucu Indian who understands and speaks the Portuguese and Tupi languages in addition to his own dialect.

I continued my journey up the Tapajoz and reached the mouth of the Cadereri River, an eastern tributary of the Tapajoz, five days after leaving the Mission of Bacabal.

There, according to what I had been told, I was supposed to meet a bold frontiersman who knew the way to the central villages. Unhappily, however, I did not find him, and the members of my crew knew nothing about the course of the Cadereri River.

Here I was, perplexed for lack of guides and information, when two Mundurucu savages appeared upon the beach.

We asked them, through the interpreter, how long it would take us to reach the source of the Cadereri.

The older of the two savages responded with the following sign: with his index finger he pointed due east, and then he traced a semicircle following the apparent course of the sun to the west, accompanying this gesture with expressive looks, motions and sounds; and he repeated this slowly and distinctly six times in such a way that before the interpreter could explain his message I had already understood that the savage meant it would take us six days.

He also told us that we would meet other Indians at the headwaters of the Cadereri, who could guide us to the village of Necodemos whence he and his companion came. [78]

I was impressed by this name of Necodemos which the Mundurucu gave one of their main villages, for it is the name of the generous and compassionate Jew who bestowed simple funeral dignities upon Christ -- a shroud to enclose his body and a sepulcher to protect it.

I do not know why the Mundurucu gave this name to their village, but I imagine that the coincidence of names is no more than a mere accident.

In any case, I decided to seek the village of Necodemos in preference to any other.